

## APPARATUS FOR PLAYING A GAME

The present invention relates to apparatus for playing a game and, in particular, to apparatus for playing a manual, semi-automated, or fully- automated  
5 game of chance where a stake may be gambled.

Manual, semi-automated and automated games of chance are well known in the art and are widely available in a number of different game formats and themes. Manual games of chance where money is staked include, *inter alia*, card  
10 games and games such as roulette. Roulette has also been developed to exist in semi-automated formats. Automated games of chance where money is staked are commonly referred to as gaming machines, amusement-with-prizes machines (AWPs) or fruit machines. These gaming machines are provided for the purposes of entertainment, recreation and sport, and are sited at venues such as  
15 leisure centres, public houses, amusement arcades, clubs, bingo halls and casinos. In particular, gaming machines are sited in considerable numbers at dedicated gaming centres such as bingo halls and casinos.

The apparatus of the present invention is of particular utility in new game  
20 formats developed by the applicant which are well suited to the game universally known as roulette. Traditionally, the game of roulette takes the form of a roulette table having a roulette wheel and a playfield. A croupier oversees and manages the game. In each turn of play, players of the game are invited to place a stake, typically in the form of a 'chip', on the playfield so as to bet on a particular  
25 outcome or range of outcomes of the roulette wheel. The roulette wheel is spun, a ball released, and the ball comes to rest in one of a number of possible positions provided on the roulette wheel, thus determining the game outcome in that turn of play. The croupier 'banks' the stakes of losing players and pays out wins from the bank to winning players of the game. A typical roulette wheel has  
30 thirty seven segments numbered '0' to '36', with numerals '1' to '36' positioned on alternating red and black coloured segments and the numeral '0' occupying a green segment. The playfield comprises a green baize marked with a grid of play

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spaces having not only the corresponding thirty seven possible number outcomes, but also having play spaces specifically assigned with 'odd', 'even', 'red', 'black', '1st 12', '2nd 12' '3rd 12' designations to enable a player to place a stake on a more likely outcome (albeit with a reduced payout corresponding to the reduced odds). A stake placed on a single number only is termed a 'straight up' bet. A stake placed on combinations of play spaces is termed a 'party bet'.

It is known in the art to provide some degree of automation of the game of roulette. For example, in GB 2284499 A of McNally Gaming Limited, there is disclosed a self contained coin operated gaming machine having a roulette wheel behind a glass screen. Optical sensors are provided for determining the position of the wheel as it rotates. Means is also provided for detecting when a ball has settled in a segment of the wheel, thus determining the number selected by the ball and whether a player of the game has preselected that number for play. If so, the player is a winner and a prize is awarded.

The present invention is concerned with improving upon traditional apparatus for playing games of chance and addresses the limitations of the prior art.

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The present invention provides, in a first aspect, apparatus for playing a game comprising:

a plurality of randomisers each for generating one or more random indicia from a predefined set of indicia in a turn of play;

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one or more playfields for play in each turn of play, the one or more playfields each being associated with at least one of the plurality of randomisers and offering for play via that playfield the same predefined set of indicia as the associated randomiser or randomisers; and

evaluation means for:

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determining which of the plurality of randomisers has or have been selected for play by a player in a turn of play;

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determining if the one or more random indicia generated by the selected randomiser or randomisers in a turn of play has or have been validly selected for play via a playfield or playfields associated with that randomiser or randomisers and is a winning game entry;  
5                   and  
                  awarding a winning payment or credit to the player of a winning game entry;

wherein, in each turn of play:

                  each player of the game selects one or more of the plurality of  
10   randomisers for play in that turn of play and for each randomiser selected uses at least one of the associated playfields by placing a stake or stakes to select one or more indicia on that playfield for play in that turn of play, whereafter:

                  at least the selected one or selected ones of the plurality of randomisers each generate one or more random indicia from the predefined set of indicia for  
15   that turn of play; and

                  the evaluation means determines if there are any winning game entries and awards a winning payment or credit to each player of a winning game entry.

20   In a second aspect, the present invention provides apparatus for playing a game comprising:

                  a plurality of randomisers each for generating one or more random indicia from a predefined set of indicia in a turn of play;

                  a plurality of playfields for play in each turn of play, the plurality of playfields each being associated with at least one of the plurality of randomisers  
25   and offering for play via that playfield the same predefined set of indicia as the associated randomiser or randomisers; and

                  evaluation means for:

                  determining which of the plurality of randomisers has or have been selected for play by a player in a turn of play;  
30   determining if the one or more random indicia generated by the selected randomiser or randomisers in a turn of play has or have been validly selected for play via a playfield or playfields associated

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with that randomiser or randomisers and is a winning game entry;  
and  
awarding a winning payment or credit to the player of a winning  
game entry;

5 wherein, in each turn of play:

each player of the game selects one or more of the plurality of  
randomisers for play in that turn of play and for each randomiser selected uses at  
least one of the associated playfields by placing a stake or stakes to select one or  
more indicia on that playfield for play in that turn of play, whereafter:

10 at least the selected one or selected ones of the plurality of randomisers  
each generate one or more random indicia from the predefined set of indicia for  
that turn of play; and  
the evaluation means determines if there are any winning game entries and  
awards a winning payment or credit to each player of a winning game entry.

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In a third aspect, the present invention provides apparatus for playing a  
game comprising:

a central control unit comprising a plurality of randomisers each generating  
one or more random indicia from a predefined set of indicia in each turn of play;

20 one or more terminals each connectable to the central control unit for  
communication therebetween, each terminal being provided for use by a player to  
play the game and offering that player one or more playfields for play in each turn  
of play, the one or more playfields each being associated with at least one  
randomiser of the central control unit and offering for play via that playfield the  
25 same predefined set of indicia as the associated randomiser;

evaluation means for determining if the one or more random indicia  
generated by each of the plurality of randomisers in each turn of play has or have  
been validly selected for play via a playfield on a terminal in any turn of play and  
is a winning game entry and for awarding a winning payment or credit to the  
30 player of a winning game entry, wherein in each turn of play:

each player of the game uses a terminal to select one or more of the  
plurality of randomisers for play in that turn of play and for each randomiser

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selected uses at least one of the associated playfields by placing a stake or stakes to select one or more indicia on that playfield for play in that turn of play, whereafter:

- the plurality of randomisers of the central control unit each generate one or  
5 more random indicia from the predefined set of indicia for that turn of play; and  
the evaluation means determines if there are any winning game entries  
and awards a winning payment or credit to each player of a winning game entry.

- In a fourth aspect, the present invention provides apparatus for playing a  
10 game comprising:

a central control unit comprising a randomiser for generating one or more  
random indicia from a predefined set of indicia in each turn of play;

- one or more terminals each connectable to the central control unit for  
communication therebetween, each terminal being provided for use by a player to  
15 play the game and offering that player a plurality of playfields for play in each turn  
of play, the plurality of playfields each offering for play via that playfield the same  
predefined set of indicia as the randomiser;

- evaluation means for determining if the one or more random indicia  
generated by the randomiser in each turn of play has or have been validly  
20 selected for play via a playfield on a terminal in any turn of play and is a winning  
game entry and for awarding a winning payment or credit to the player of a  
winning game entry, wherein in each turn of play:

- each player of the game uses a terminal to select one or more of the  
plurality of playfields for play in that turn of play and for each playfield selected  
25 places a stake or stakes to select one or more indicia on that playfield for play in  
that turn of play, whereafter:

the randomiser of the central control unit generates one or more random  
indicia from the predefined set of indicia for that turn of play; and

- the evaluation means determines if there are any winning game entries  
30 and awards a winning payment or credit to each player of a winning game entry.

In a fifth aspect, the present invention provides apparatus for playing a game comprising:

a central control unit comprising one or more randomisers each generating one or more random indicia from a predefined set of indicia in each turn of play;

5 one or more terminals each connectable to the central control unit for communication therebetween, each terminal being provided for use by a player to play the game and offering that player one or more playfields for play in each turn of play, the one or more playfields each being associated with at least one randomiser of the central control unit and offering for play via that playfield the  
10 same predefined set of indicia as the associated randomiser;

evaluation means for determining if the one or more random indicia generated by each of the one or more randomisers in each turn of play has or have been validly selected for play via a playfield on a terminal in any turn of play and is a winning game entry and for awarding a winning payment or credit to the  
15 player of a winning game entry, wherein in each turn of play:

each player of the game uses a terminal to select one or more of the randomisers for play in that turn of play and for each randomiser selected uses at least one of the associated playfields by placing a stake or stakes to select one or more indicia on that playfield for play in that turn of play, whereafter:

20 the one or more randomisers of the central control unit each generate one or more random indicia from the predefined set of indicia for that turn of play; and the evaluation means determines if there are any winning game entries and awards a winning payment or credit to each player of a winning game entry.

25 In a sixth aspect, the present invention provides apparatus for playing a game comprising:

a central control unit comprising a randomiser for generating one or more random indicia from a predefined set of indicia in each turn of play;

one or more terminals each connectable to the central control unit for  
30 communication therebetween, each terminal being provided for use by a player to play the game and offering that player a playfield for play in each turn of play, the playfield offering for play the same predefined set of indicia as the randomiser;

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evaluation means for determining if the one or more random indicia generated by the randomiser in each turn of play has or have been validly selected for play via the playfield on a terminal in any turn of play and is a winning game entry and for awarding a winning payment or credit to the player of a winning game entry, wherein in each turn of play:

- 5 each player of the game uses a terminal to place a stake or stakes to select one or more indicia on that playfield for play in that turn of play, whereafter:
- the randomiser of the central control unit generates one or more random indicia from the predefined set of indicia for that turn of play; and
- 10 the evaluation means determines if there are any winning game entries and awards a winning payment or credit to each player of a winning game entry.

In a seventh aspect, the present invention provides apparatus for playing a game comprising:

- 15 a central control unit comprising one or more randomisers for generating one or more random indicia from a set of available indicia in each turn of play;
- a plurality of terminals each connectable to the central control unit for communication therebetween, each terminal being provided for use by a player of the game and offering that player a plurality of independent game entries for play
- 20 in each turn of play, each terminal comprising a payment acceptor means for receiving payment or credit of one or more stakes from a player of the game, and a selector means for selecting one or more of the independent game entries for play in a turn of play;
- comparator means for determining when the one or more random indicia
- 25 generated by one or more randomisers in each turn of play has been validly selected for play on a terminal in a game entry by a player and is a winning game entry; and
- payment means for awarding a winning credit or payment to the player of a winning game entry, wherein in each turn of play:
- 30 each player of the game selects a terminal for play, deposits one or more stakes via the payment acceptor or uses banked or credited stakes to provide credit for that turn of play, selects one or more of the independent game entries

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for play in that turn of play and, for each independent game entry, selects one or more indicia from the set of available indicia for play in that turn of play; and

the one or more randomisers each generate one or more random indicia from the set of available indicia for that turn of play, whereupon:

5       the comparator means determines if there are any winning game entries; and

the payment means awards a winning credit or payment to the player of a winning game entry.

10       In an eighth aspect, the present invention provides apparatus for playing a game comprising:

a central control unit comprising one or more randomisers each generating one or more random indicia from a predefined set of indicia in each turn of play;

one or more terminals each connectable to the central control unit for  
15       communication therebetween, each terminal being provided for use by a player to play the game and offering that player a plurality of independent game entries for play in each turn of play, each terminal comprising payment acceptor means for receiving payment from or accessing credit for that player of one or more stakes, and selector means for use by that player to select one or more of the  
20       independent game entries for play in a turn of play and to place one or more stakes by selecting one or more indicia from the predefined set of indicia for play in each independent game entry selected for play;

evaluation means for determining if the one or more random indicia generated by the one or more randomisers in each turn of play has or have been  
25       validly selected for play on a terminal in any game entry by a player and is a winning game entry and awarding a winning payment or credit to the player of a winning game entry, wherein in each turn of play:

each player of the game uses a terminal to select one or more of the plurality of independent game entries for play in that turn of play and, for each  
30       independent game entry selected for play, places one or more stakes by selecting one or more indicia from the predefined set of indicia for play in that turn of play; and



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the one or more randomisers each generate one or more random indicia from the predefined set of indicia for that turn of play, whereupon the evaluation means determines if there are any winning game entries and awards a winning payment or credit to each player of a winning game entry.

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In a ninth aspect, the present invention provides apparatus for playing a game comprising:

a central control unit comprising a plurality of randomisers each generating one or more random indicia from a predefined set of indicia in each turn of play;

10 one or more terminals each connectable to the central control unit for communication therebetween, each terminal being provided for use by a player to play the game and offering that player a plurality of independent game entries for play in each turn of play, each terminal comprising payment acceptor means for receiving payment from or accessing credit for that player of one or more stakes, and selector means for use by that player to select one or more of the  
15 independent game entries for play in a turn of play and to place one or more stakes by selecting one or more indicia from the predefined set of indicia for play in each independent game entry selected for play;

evaluation means for determining if the one or more random indicia  
20 generated by the plurality of randomisers in each turn of play has or have been validly selected for play on a terminal in any game entry by a player and is a winning game entry and awarding a winning payment or credit to the player of a winning game entry, wherein in each turn of play:

each player of the game uses a terminal to select one or more of the  
25 plurality of independent game entries for play in that turn of play and, for each independent game entry selected for play, places one or more stakes by selecting one or more indicia from the predefined set of indicia for play in that turn of play; and

the plurality of randomisers each generate one or more random indicia  
30 from the predefined set of indicia for that turn of play, whereupon the evaluation means determines if there are any winning game entries and awards a winning payment or credit to each player of a winning game entry.

Preferred embodiments of the present invention will now be described by way of example only with reference to the accompanying drawings, in which:

Figure 1 is a schematic view of a first preferred embodiment of apparatus  
5 for playing a game according to the present invention, illustrating a plurality of terminals each connected to a central control unit;

Figure 2 is a front elevation view of the central control unit of the game apparatus of Figure 1;

Figure 3 is a detail view of a visual display unit of the central control unit of  
10 Figure 2.

Figure 4 is a front elevation view of one terminal of the game apparatus of Figure 1;

Figure 5 is a detail view of an interactive visual display unit of the terminal of Figure 4;

15 Figure 6 illustrates a customised design of roulette wheel for use in an alternative embodiment of game apparatus according to the present invention;

Figure 7 illustrates a customised playfield for use with the customised roulette wheel design of Figure 6; and

Figure 8 is a front elevation view of a further alternative embodiment of  
20 apparatus for playing a game according to the present invention, illustrating a single terminal connected to a central control unit.

Referring first to Figure 1, a gaming apparatus 10 according to a first preferred embodiment of the present invention is shown. A central control unit  
25 comprises a visual display unit 22, preferably a plasma screen, and programmable electronic processing means. Three terminals 40 are sited in close proximity to the central control unit 20, each terminal 40 being of conventional gaming machine construction. Each terminal 40 comprises an interactive visual display unit 42, preferably a TFT touch sensitive screen, and its  
30 own programmable electronic processing means. All terminals 40 are connectable to the central control unit 20 so as to permit communication

therebetween and, if desired, with one another. Any terminal 40 may be used by a player of the game in each turn of play.

In Figure 2, there is shown a front elevation view of the central control unit 20 which is preferably supplied in two parts, an upper unit 21 and a lower unit 23, so as to facilitate ease of shipping, handling and installation. The upper unit 21 houses the visual display unit 22, background lighting for illuminating the frontal area of the upper unit 21 surrounding the visual display unit 22, and a toughened glass frontage overlying at least part of the upper unit 21 of the central control unit 20. The lower unit 23, upon which the upper unit 21 is preferably mounted, contains a master control unit provided with the programmable electronic processing means and a power supply, all of which are connectable to each of the terminals 40 of the gaming apparatus 10. The electronic processing means of the central control unit 20 has overall control of the gaming apparatus 10 and functions as at least one randomiser (random number/indicia generator) to generate random indicia in each turn of play of the game.

In Figure 3, a typical screen graphic displayed by the visual display unit 22 of the central control unit 20 is shown. The electronic processing means of the central control unit 20 generates the necessary signals for the visual display unit 22 to display a playfield 24 comprising a plurality of play spaces 25 arranged in an array. A particular indicia 26 or range of indicia 28 from a predefined set of indicia are reproduced in each play space 25. The playfield 24 illustrated in this preferred embodiment is for use with what is known in the art as a 'double zero' roulette wheel. The electronic processing means of the central control unit 20 additionally generates the necessary signals for the visual display unit 22 to display six roulette wheel game windows 30, each simulating electronically at least part of a 'roulette wheel'. These are displayed on the visual display unit 22 below the playfield 24. Each 'roulette wheel' is in fact a randomiser of the gaming apparatus 10 having a predefined set of indicia. In this preferred embodiment each roulette wheel is the same and the predefined set of indicia is that of a standard 'double zero' roulette wheel, so as to be compatible with the playfield

24. Each roulette wheel game window 30 is dynamic in the sense that the electronic processing means can generate signals which cause the visual display unit 22 to simulate both a spinning roulette wheel and a roulette wheel at rest. The or each randomiser can generate an independent random indicia result from the predefined set of 'double zero' roulette wheel indicia for each of the six roulette wheel game windows 30. The winning indicia 31 of each roulette wheel are then displayed on the visual display unit 22, preferably identified by an electronic representation of a ball 39 or other indicia coming to rest or appearing in a ball position 32 adjacent the winning indicia 31.

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In Figure 4, there is illustrated a front elevation view of a terminal 40. The terminal 40 houses the interactive visual display unit 42 and the electronic processing means. The interactive visual display unit 42 displays graphics under the control of the electronic processing means of the terminal 40 and/or the electronic processing means of the central control unit 20 and is responsive to tactile inputs from a player of the game. These player inputs can be relayed from the terminal 40 to the central control unit 20. A coin slot 43 and a note acceptor 44 are provided for receipt of coins and notes from a player of the game. A payout button 49 and payout tray 50 are provided for a player to collect winnings in the form of coins and/or notes paid out directly by the terminal 40. Function buttons 45, 46, 47 and 48 are provided on the terminal 40 for a player to use where necessary in each turn of play of the game. These function buttons 45, 46, 47 and 48 are so-called 'hard key' buttons used to offer the same or additional functionality to that provided by the so-called 'soft key' buttons displayed by the touch screen interactive visual display unit 42. Function button 46 is used to clear all stakes placed by the player on the playfield 24 in that turn of play. Function button 47 is used to clear the last stake placed on the playfield 24 by the player in that turn of play. Function buttons 48 allow a player to repeat the stakes already placed on the playfield 24 for one or more further roulette wheels simulated by roulette wheel game windows 30 in that turn of play. Function button 45 gives a player of the game access to game information.

In the first preferred embodiment of gaming apparatus 10 there are two modes, a first 'attract mode' and a second 'game mode'. In 'attract mode', a full demonstration of the game is given by the central control unit 20 and each terminal 40. Each terminal 40 acts under the control of the central control unit 20 in the absence of players. This simulation demonstrates to potential players all aspects and functionality of the game. In 'game mode', a typical game cycle comprises the sequence 'place your bets', 'tick-tock' (a countdown period for players to place their bets), 'no more bets' (a cut-off), 'spin the wheels', results and evaluation, and 'all winners paid'.

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To play a game, the or each player of the game must select a terminal 40 for play and deposit funds via one or both of the coin receiving acceptor 43 or note receiving acceptor 44 to provide credit for at least one turn of play. The credit balance deposited and/or won by the player of the game is displayed by the visual display unit 42 at window 37 (Figure 5) under the control of the electronic processing means of the terminal 40. This information is also communicated to the electronic processing means of the central control unit 20.

The electronic processing means of the central control unit 20 detects that a stake is ready to be placed by a player of the game and, where necessary, the game apparatus 10 changes from the 'attract mode' to the 'play mode' and a first game period begins. Alternatively, this mode change may instead be effected by a player using a soft key and/or hard key (e.g. named 'play', not shown) made available on a terminal 40. During this first game period, the electronic processing means of the central control unit 20 broadcasts 'place your bets' both audibly and/or for display from the central control unit 20 and electronically to each of the terminals 40 for display and/or audible reproduction. Preferably, a countdown period begins and the electronic processing means of the central control unit 20 broadcasts 'tick-tock' repeatedly both audibly and/or for display from the central control unit 20 and electronically to each of the terminals 40 for display and/or audible reproduction. This prompts each player of the game who has credit available and wishes to play to use the interactive visual display unit 42

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of the terminal 40 to select the or each roulette game wheel window 30 they wish to play in that turn of play, as well as to place stakes on the playfield 24 in a manner similar to that for the traditional game of roulette. For example, with particular reference to Figure 5, a player may select the desired chip value for

5 play using the chip value selector 27 on the interactive visual display unit 42. A player touches the up arrow to increase the value of the chips selected for play or touches the down arrow to reduce the value of the chips. The chip value increments may be in units or in multiples of units, and may be simple numerical values or may represent a currency value. A player may place stakes on the

10 playfield 24 simply by touching the interactive visual display unit 42 in a relevant location so as to place a chip on a play space 25 of the playfield 24, either on a single indicia 26 (i.e. a 'straight up' bet) or on an intersection or side wall of a play space 25 (i.e. a 'party' bet). The stakes placed by a player may be subject to rules policed by the terminal 40 and/or central control unit 20 which stipulate the

15 maximum bet on a winning chance, as is known in the traditional game of roulette. A player may de-select, re-select or further select one or more additional 'roulette wheels' (i.e. independent randomisers) for play by touching the relevant roulette wheel game window 30 which will toggle that window between selected and unselected modes. Preferably, the roulette wheel game

20 windows 30 selected for play are displayed in full colour, whilst the unselected roulette wheel game windows 30 are displayed in greyscale.

In this preferred embodiment, the total bet staked by a player will be a multiple of the number and value of chips placed on the playfield 24 and the

25 number of roulette wheel game windows 30 selected for play by a player in that turn of play. The value of the bet staked per roulette wheel game window 30 (i.e. per independent game entry) is indicated on the interactive visual display unit 42 at window 33. The number of roulette wheel game windows 30 selected for play by a player is indicated on the interactive visual display unit 42 at window 34, and

30 the total bet staked in that turn of play is indicated at window 35.

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A player may add to, delete from, or amend any bets placed on the playfield 24 during the 'tick-tock' countdown period of the game (indicated audibly and/or graphically) simply by touching the interactive visual display unit 42 to toggle between selections. Touching the interactive visual display unit 42 causes  
5 a selection to be made and touching the screen again causes a de-selection (so-called 'soft key' operation). Alternatively, a player can use the so-called 'hard key' function buttons 'clear all bets' button 46, 'clear last bet' button 47 and 'repeat bet' button 48, each of whose function is self-explanatory. Once the 'tick-tock' countdown period has elapsed, the central control unit 20 broadcasts 'no  
10 more bets' both audibly and/or for display from the central control unit 20 and electronically to each of the terminals 40 for display and/or audible reproduction. After this 'cut-off' stage, each player selection on each of the terminals 40 is fixed and can no longer be amended. Game play data from each of the terminals 40 is communicated back to and stored by the central control unit 20 for statistical  
15 analysis purposes, and may also be used for display on the visual display unit 22.

As an alternative (or in addition) to the 'tick-tock' countdown period, the or each player may indicate his or her readiness to continue with play after finalising their bets by touching or depressing a soft key and/or hard key (e.g. named  
20 'ready', 'start', 'spin' or 'play', not shown) made available on a terminal 40. If the or all players have indicated their readiness to continue, the game proceeds.

Next, the central control unit 20 broadcasts 'spin the wheel' both audibly and/or for display from the central control unit 20 and electronically to each of the  
25 terminals 40 for display and/or audible reproduction. Preferably, the electronic processing means of the central control unit 20 and of each terminal 40 together simulate a spinning roulette wheel in each of the six roulette wheel game windows 30, irrespective of whether or not each has been selected for play. An electronic representation of a ball 39 is then dropped into the simulated roulette  
30 wheel of each roulette wheel game window 30 whereupon the ball spins for a time before dropping into a random ball position 32 adjacent to an indicia 31 of the roulette wheel to indicate the random indicia result of that randomiser of the

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central control unit 20. Each roulette wheel game window 30 may stopped be sequentially (in or out of turn). These spinning roulette wheel simulations are displayed simultaneously in each of the six roulette wheel windows 30 of both the visual display unit 22 of the central control unit 20 and the visual display unit 42 of each terminal 40.

Next, the terminals 40 each evaluate their playfield 24 for each of the roulette wheel game windows 30 selected for play (i.e. each independent game entry) by a player in that turn of play. Each winning entry is indicated as such to the player by the terminal 40, whereupon the win display window 36 of the visual display unit 42 is updated and then the win credit added to the credit display window 37. This information is also relayed from each terminal 40 to the central control unit 20 where the electronic processing means updates its database with all relevant game data for that turn of play.

Once the central control unit 20 has collected the results from each of the terminals 40, then the central control unit 20 broadcasts 'all winners paid' both audibly and/or for display from the central control unit 20 and electronically to each of the terminals 40 for display and/or audible reproduction. The central control unit 20 then initialises itself and, provided there are players with stakes to placed, the next turn of play of the game begins. Alternatively, if not, the gaming apparatus 10 enters 'attract mode'.

It will be appreciated that the first preferred embodiment of gaming apparatus 10 described in detail above may be varied in many respects, certain of which will now be described by way of example. In this regard, the scope of the invention is that as set out in the appended claims.

Whilst it has been described above that it is preferred that the electronic processing means of the central control unit 20 and of each terminal 40 together simulate a spinning roulette wheel in each of the six roulette wheel game windows 30 irrespective of whether or not each has been selected for play, it will



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be appreciated this is just one option. Alternatively, only those roulette wheel game windows 30 selected for play by a player (or as a further alternative any player) may simulate a spinning roulette wheel in that turn of play.

- 5           When a player of a game selects a chip value using the chip value selector 27, this may be done at any time during the 'tick-lock' countdown period of the game or until the player(s) has/have indicated their readiness to continue with play. The effect of this in the preferred embodiment described above is to change the value of all chips already placed on the playfield 24 as well as
- 10 subsequently. However, it is possible to program the game apparatus 10 such that, as an alternative, already placed bets retain their original value and, upon changing the chip value via the chip value selector 27, subsequent placed chips are placed with the new different chip value.
- 15           In the preferred embodiment, a single playfield 24 is made available to a player by each terminal 40 no matter how many 'roulette wheels' (i.e. randomisers) are made available for play by a player via roulette game wheel windows 30 and selected for play in each turn of play. This restricts the bet selection process because the bets staked on the playfield 24 apply to all roulette
- 20 wheel game windows 30 selected for play by a player in that turn of play. A player may wish instead to bet on a greater or fewer number of indicia for each different roulette game wheel window 30 selected for play, or simply to select different indicia for play. Accordingly, the gaming apparatus 10 can be modified such that when a player selects to play, for example, the roulette wheel game
- 25 windows 30 marked "Game 1" and "Game 4" respectively, it is possible to provide and display a separate playfield 24 for each roulette wheel game window 30 to facilitate the possibility of placing different bets for each independent game entry in a single turn of play. In this case, a separate playfield 24 may be provided for each of the six roulette wheel game windows 30 (i.e. each randomiser).
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Furthermore, it will be appreciated that the gaming apparatus 10 need not be limited to six 'roulette wheels' (i.e. randomisers) described in the preferred

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embodiment of the gaming apparatus 10. Any number of 'roulette wheels' are possible. Alternatively, just one roulette wheel may be displayed and spun, but a plurality of balls provided and released simultaneously or sequentially, each coming to rest and determining separate winning indicia results. Essentially, each ball is a separate randomiser in its own right. In this case, the receptacles provided in the 'roulette wheel' for the balls may be made large enough such that each can accommodate all of the balls such that the full range of indicia are available for play in each turn of play. The or each playfield 24 would then be associated with a particular ball rather than a particular roulette wheel. Each ball would be readily distinguishable from all others (e.g. by number and/or colour). Indeed, it is possible to have a plurality of balls and a plurality of roulette wheels, with playfields associated with one or both types of randomiser (e.g. two balls for one of three roulette wheels and two further roulette wheels each having one ball, with four playfields, one for each randomiser). The result of the or each randomiser can of course be presented electronically on the visual display units 22, 42 in any desired form. For example, simple indicia may be individually displayed rather than portions of a roulette wheel.

It will be further appreciated that the gaming apparatus 10 need not be limited to six identical roulette wheels and associated playfields 24. It is possible to have different known designs ('single zero' and 'double zero' formats) or customised designs of roulette wheel and playfield available for play by a player on a single terminal 40 in each turn of play. Each such randomiser will have its own predefined set of indicia which may be the same or different to that of another. For example, the electronic processing means of the central control unit 20 and terminals 40 can be programmed to have six independent randomisers, say two standard 'single zero' roulette wheels and associated playfields ('Game 1' and 'Game 2'), two standard 'double zero' roulette wheels and associated playfields ('Game 3' and 'Game 4'), and two customised 'twin eagle' roulette wheels and associated playfields ('Game 5' and 'Game 6'). The customised 'twin eagle' format of the applicant is described in detail below.

With reference now to Figures 6 and 7, there is illustrated a non-standard roulette wheel 300 and associated playfield 240. This customised format is called 'twin eagle' by the applicant. The predefined indicia set comprises numerical indicia 310 ranging from '1' to '30' on alternating red and black coloured segments, but additionally comprises two separate regions 340, 360 of three typical sized wheel width segments 350, 370. Each region 340, 360 is assigned the colours gold and silver respectively with an eagle indicia provided on each, rather than numerical indicia. Thirty-six traditional ball receiving segments 320 are provided in a known fashion. A corresponding 'twin eagle' playfield 240 is likewise different from a standard playfield in the sense that it contains the numerical indicia 250 ranging from '1' to '30' and additionally comprises two further play spaces 260 each designated with the gold or silver colour and an indicia in the form of an eagle. All other aspects of the gaming apparatus 10 are similar to that described above. It will be appreciated, however, that this changes the format of the game and in particular the odds that a player is able to play in each turn of play. Other alternatives are of course possible as will be readily appreciated by the skilled person in the art. Indeed, any customised predefined indicia set or sets may be employed in a standard or customised roulette wheel and playfield for use in the gaming apparatus 10.

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Furthermore, in yet further embodiments of the present invention the randomiser(s), indicia set(s) and playfield(s) may take a form more suitable for other game formats. For example, one such alternative game format requires the randomiser(s) to take the form of a dice or die (or sets thereof) bearing standard game and/or bespoke indicia. The playfield(s) will bear betting/playing spaces corresponding at least to each of those individual indicia borne by the dice or die and may also bear further betting/playing spaces (e.g. such as 'odd', 'red', 'king', 'diamond' etc. depending on the indicia set employed) to provide the option of party bets.

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In addition, further betting opportunities may be presented to a player of the gaming apparatus 10, such as the 'jackpot game' windows 38 illustrated in

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the preferred embodiment with particular reference to Figure 5. In this case, a player of the game may bet a stake on the number of like winning indicia in each turn of play of each roulette wheel game window 30. Since such a combination is far more unlikely, and so a high value prize may be offered by the operator for any such winning bet, typically a large cash sum or a car, for example.

Whilst in the first preferred embodiment described, the gaming apparatus 10 comprises a central control unit 20 and three terminals 40 each connected to the central control unit 20, this is of course only exemplary. The game apparatus 10 is modular in nature and so it is possible that any number of terminals may be connected to the central control unit 20, from one to any number. Indeed, each terminal 40 does not have to be located at the same site as the central control unit 20. One or more terminals may be located remotely at a different site and connected to the central control unit 20 via a communications network such as the Internet or an intranet, for example.

Furthermore, with the advent of the Internet it will be appreciated that a player may use his or her own personal computer as a terminal 40 in which case software may be downloaded from the central control unit 20, a game operator's website, or may be purchased separately for loading on to the personal computer in order that the personal computer has the full functionality of a terminal 40. Alternatively, the central control unit 20 may be modified such that it contains all of the electronic processing means and software necessary to conduct all of the necessary game functions itself. Accordingly, this unit may, for example, take the form of a single stand alone unit of the traditional gaming/AWP/fruit machine type.

In this regard, a further embodiment of game apparatus 100 according to the present invention is illustrated in Figure 8. A central control unit 200 and single terminal 400 may be located in close proximity or indeed mounted in a single tower type housing. Both the central control unit 200 and the terminal 400 function in the same manner as previously described above but are simply more

compact in nature. As an alternative (or in addition) to the 'tick-tock' countdown period previously described, the or each player may indicate his or her readiness to continue with play after finalising their bets by touching or depressing a soft key and/or hard key (e.g. named 'ready', 'start', 'spin' or 'play', not shown) made available on the combined central control unit 200 and terminal 400. If the or all players have indicated their readiness to continue, the game proceeds. The central control unit 200 comprises a visual display unit 220, preferably a plasma screen, and programmable electronic processing means. The terminal 400 houses the interactive visual display unit 420 and the electronic processing means. The interactive visual display unit 420 displays graphics under the control of the electronic processing means of the terminal 40 and/or the electronic processing means of the central control unit 200 and is responsive to tactile inputs from a player of the game. These player inputs can be relayed from the terminal 400 to the central control unit 200. A coin slot 430 and a note acceptor 440 are provided for receipt of coins and notes from a player of the game. A payout button 490 and payout tray 500 are provided for a player to collect winnings in the form of coins and/or notes paid out directly by the terminal 400. Function buttons 450, 460, 470 and 480 are provided on the terminal 400 for a player to use where necessary in each turn of play of the game. These function buttons 450, 460, 470 and 480 are so-called 'hard key' buttons used to offer the same or additional functionality to that provided by the so-called 'soft key' buttons displayed by the touch screen interactive visual display unit 420. Function button 460 is used to clear all stakes placed by the player on the playfield 240 in that turn of play. Function button 470 is used to clear the last stake placed on the playfield 240 by the player in that turn of play. Function buttons 480 allow a player to repeat the stakes already placed on the playfield 240 for one or more further roulette wheels simulated by roulette wheel game windows 300 in that turn of play. Function button 450 gives a player of the game access to game information. Whilst this particular example of a single stand alone unit 100 can be seen to comprise two visual display units 220, 420, it will be appreciated that one of these units may be dispensed with and instead a single interactive or simple visual display unit can provide the functionality of both (either by toggling

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between views or by having all relevant data illustrated on the single display unit, for example).

Whilst in the preferred embodiments described above the means for  
5 accepting payment comprises a coin or note receiving apparatus, it will be appreciated that any means of accepting credit well known in the art may be employed in a game apparatus according to the present invention. For example, a payment accepting means may be provided to accept tokens, notes, credit cards or charge cards. Alternatively, the gaming apparatus may be linked to a  
10 central electronic memory holding account details of a player and a player may identify him or herself to the gaming apparatus by, for example, entering a personal identification number, and in each turn of play the gaming apparatus adjusts the personal account of the player stored in the electronic memory.

15 Additionally, a portable hand held unit with electronic processing means, card and/or paper receipt readers and a printer may be provided for use by a game operator or manager in order to produce a credit slip for winnings over a predetermined limit, or to accept credit from a player. The portable unit is connectable to a terminal 40 via an RS232, USB or similar type wire connection,  
20 or via an infra-red or other wireless communications link for data exchange therebetween. This portable unit may be provided for convenience, safety/security reasons or to comply with legislative requirements.

Whilst the visual display units 22, 42 are preferably of the plasma and TFT  
25 touch sensitive types respectively, it will be appreciated that any form of visual display unit may be alternatively or additionally employed. Examples of such display units include, *inter alia*, cathode ray tubes, liquid crystal displays (LCDs), and projectors.

30 It will be appreciated that wire free communication between the central control unit 20, terminals 40 and any associated apparatus is possible, rather

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than via a hard wired connection. This may be achieved using infra-red, radio, cellular, blue tooth or any other such wire free communication medium.

The electronic processing means in each of the central control unit 20 and  
5 each terminal 40 are programmable and data storage capability is additionally provided. Game software and game play data may be stored by either or both of the central control unit 20 and each terminal 40. Different game software is available so that different game formats and themes may be played on the game apparatus 10 of the present invention. In particular, different versions of the  
10 'Jackpot Roulette' game software are available, each of which are produced to comply with the different gaming legislation and regulations applicable to the different sites and countries in which the game apparatus 10 is sited and operated. The data storage facility database in each of the central control unit 20 and each terminal 40 is used by operators of the game apparatus 10 in order to  
15 obtain reports on all aspects of game play such as, for example, cash in, cash out, number of games played, number of games played per player in each turn of play, and win history.

As mentioned above, the present invention provides apparatus for playing  
20 a manual, semi-automated, or fully-automated game of chance where a stake may be gambled. Whilst in the preferred embodiments described above in detail parts of the apparatus such as the roulette wheels, for example, are simulated in electrical/electronic form, the present invention is not limited to this format and can instead take the form of a traditional or bespoke physical apparatus. For  
25 example, the present invention may take the form of a physical roulette wheel or wheels and a terminal for use by a player to place bets on a playfield or playfields. The playfield(s) may be simply represented electronically on the terminal and made available for use by the player, or the terminal may be used by a player to indicate to a croupier or other person the bet or bets to be  
30 physically staked on a physical playfield(s). Such a terminal may be located in close proximity to the physical roulette wheel(s) and/or playfield(s) or, alternatively, at a remote location. In either case, the terminal may be supplied

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by live video feed from, or a camera link with, the physical apparatus. Also, whilst in the main the apparatus described in detail above is automated as far as possible, this level of automation may be detrimental to a player's interest in a particular game format or may be precluded by legislation. In such a case, user  
5 interaction can be increased by requiring more manual inputs by the player or players of the game. For example, a player of the game may be required to spin the physical roulette wheel or wheels by hand or start the electronic simulation of such roulette wheels by depressing a button on the terminal or touching an area of the screen.

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It will be appreciated that the above description is not limiting and that the game apparatus, game format, playfield, indicia sets can all be varied so as to provide a vast array of games which may be played by a player at multiple sites or indeed across the world by remote access. This functionality together with  
15 the particular inventive concept as set out in the appended claims gives rise to a new gaming experience.